

CLAIMS

What is claimed is:

- 5 1. A method of selecting a tester design comprising:
 selecting one or more design alternatives,
 constructing a classifier for each alternative using sample data,
 construction Operating Characteristics curves for each classifier, and
 selecting a design alternative based on the Operating Characteristic curves.
- 10 2. The method of Claim 1 where the step of selecting a design alternative further
 comprises:
 weighting each Operating Characteristics curve using cost constraints to form a result,
 and
15 selecting the Operating Characteristics curve with the minimal result.
3. The method of Claim 1 where classifiers for each alternative are constructed from
 sample data gathered through data acquisition.
- 20 4. The method of Claim 3 where data acquisition uses a factorial design when more than
 one alternative is present.
5. The method of Claim 3 where data acquisition uses a one-way layout when only one
 alternative is present.
- 25 6. A computer readable medium that includes executable instructions for processing
 sequence number information used in communications protocols, said computer readable
 medium comprising:
 code for selecting one or more design alternatives,
30 code for constructing a classifier for each alternative using sample data,
 code for construction Operating Characteristics curves for each classifier, and
 code for selecting a design alternative based on the Operating Characteristic curves.

7. The computer readable medium of Claim 6 where the code for selecting a design alternative further comprises:

code for weighting each Operating Characteristics curve using cost constraints to form a result, and

5 code for selecting the Operating Characteristics curve with the minimal result.